OBSERVATION OF DIURNAL BEHAVIOUR IN THE GECKO *STROPHURUS JEANAE*

By DAVID ALGABA
Department of Agriculture, Baron Hay Court,
South Perth 6151

In Australia, most geckos are nocturnal in their foraging times, generally becoming active following sunset and remaining active, until it becomes too cool due to falling temperatures or too light due to a rising moon (Greer 1989). Actual observations of diurnal activity are poorly documented. However members of the 'arboreal perching' *Strophurus* appear to be the only Australian geckos that expose themselves regularly to daylight (Ehmann 1980). To date, instances of diurnal foraging or basking behaviour have been previously reported for some of the large and robust species that include *S. intermedius* (Ehmann 1980), *S. spinigerus* (Peterson and Metcalfe, 2005 and pers. obs.) and *S. strophurus* (Pianka and Pianka 1976).

This heliothermic behaviour observed in some members of the genus *Strophurus* suggests this group is also diurnal, or at least they seem to bask in full sun.

This observation presents the first record of diurnal behaviour for the extremely slender *S. jeanae* under conditions that belie its apparent fragile appearance. On 16 March 2004 at 1040 hrs, approximately 160 km northeast of Telfer (near Iron Hill, Western Australia), at 20°47'S 121°05'E, in *Triodia* sandplain, an adult *Strophurus jeanae* was observed in full sun with an estimated air temperature of 40°c. The gecko was clinging closely to a *Triodia* seed stalk about one metre from the base of the clump with head facing downward. Upon capture it was immediately noticed that the entire body colour was a 'powdery' white with no characteristic striped pattern on its dorsal or midlateral surfaces, however, the distinct longitudinal stripes returned after several hours in a calico bag.

The renowned ability of geckos to change colour in response to temperature and mood is well known, but not all species have the same capacity (Greer 1989). In general and similar to dragon lizards, geckos lighten when warm and undisturbed, and darken when cool or frightened. This is especially the case with my observation of *S. jeanae* and how the change in colour appeared to correlate with

ambient temperature. Indeed, this unexpected observation of a 'basking' *S. jeanae* in full sun supports the observations made thus far of geckos having very high critical thermal temperatures, often as high as many other lizards that are active in full sun (Greer 1989).

REFERENCES

EHMANN, H. 1980. Diurnal perching by the Southern Spiny-tailed Gecko, *Diplodactylus intermedius*. *Herpetofauna* 12: 37.

GREER, A.E. 1989. *The biology and evolution of Australian lizards*. Surrey Beatty & Sons Pty Limited, Chipping Norton.

PETERSON, M. and METCALFE, D.C. 2005. Diurnal foraging and basking by the Diplodactyline Gecko *Strophurus spinigerus spinigerus* (Gray, 1842) in a *Grevillea* shrub in an urban back yard, with notes on reproduction and the body dimensions and coloration of a juvenile. *Herpetofauna* 35: 2–3.

PIANKA, E.R. and PIANKA, H.D. 1976. Comparative ecology of twelve species of nocturnal lizards (Gekkonidae) in the Western Australian desert. *Copeia* 1976: 125–142.